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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/520,278

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EXAMINER

LIVEDALEN, BRIAN J

ART UNIT

PAPER NUMBER

2878

MAIL DATE

DELIVERY MODE

08/06/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

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Office Action Summary	Application No. 10/520,278	Applicant(s) TANAKA ET AL.	
	Examiner Brian J. Livedalen	Art Unit 2878	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 June 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 June 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☒ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This action is in response to amendment filed 6/22/2007. Claims 1-9 are pending.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-5 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Honbo (JP10074962) in view of Waldner (4809054).

In regard to claim 1, Honbo discloses (fig. 2) a leadframe having an element mount frame (11) and a shielding frame (12) that is tied via a tying portion (19) to the and that can be brought into such a state as to cover the element mount frame by bending the tying portion, wherein a photodetector (13) element having a light receiving portion is mounted on the element mount frame, and wherein the shielding frame has a window (21) such that when the shielding frame covers the element mount frame, the window overlaps the light-receiving portion of the photodetector element, thereby permitting light to strike the photodetector element (paragraphs 0013-0014). Honbo fails to disclose a fitting frame in between the element mount frame and the tying portion. However, Waldner discloses (fig. 1) a lead frame having a fitting frame (30) between an element mount frame (14) and a tying portion (34), wherein there is a gap

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between the fitting frame and element mount frame (column 3, lines 4-35). It would have been obvious to one of ordinary skill in the art to place a fitting frame in between the element mount frame and the tying portion in order to allow for fast production of a more durable lead frame (column 1, line 66 – column 2, line 24).

In regard to claim 2, Honbo in view of Waldner discloses (Waldner, fig. 1) that tie bars (22) are provided at both ends of the gap.

In regard to claim 3, Honbo in view of Waldner discloses that the element mount frame and the fitting frame are separate.

In regard to claim 4, Honbo in view of Waldner discloses (Waldner, fig. 1) that the fitting frame is in a portion near the tying portion, shaped symmetrically about the tying portion.

In regard to claim 5, Honbo discloses (fig. 2) a leadframe having an element mount frame (11) and a shielding frame (12) that is tied via a tying portion (19) to the and that can be brought into such a state as to cover the element mount frame by bending the tying portion, wherein a photodetector (13) element having a light receiving portion is mounted on the element mount frame, molding resin in which the element mount frame is sealed, and wherein the shielding frame has a window (21) such that when the shielding frame covers the element mount frame, the window overlaps the light-receiving portion of the photodetector element, thereby permitting light to strike the photodetector element (paragraphs 0013-0014). Honbo fails to disclose a fitting frame in between the element mount frame and the tying portion. However, Waldner discloses (fig. 1) a lead frame having a fitting frame (30) between an element mount

frame (14) and a tying portion (34), wherein there is a gap between the fitting frame and element mount frame.(column 3, lines 4-35). It would have been obvious to one of ordinary skill in the art to place a fitting frame in between the element mount frame and the tying portion in order to allow for fast production of a more durable lead frame (column 1, line 66 – column 2, line 24).

In regard to claim 9, Honbo in view of Waldner discloses (Honbo, fig. 2) that the element mount frame and the gap have nearly equal lengths.

Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Honbo (JP10074962) in view of Waldner (4809054) as applied to claim 5, and in view of Nishimura (2003/0121437).

In regard to claim 6, Honbo in view of Waldner discloses a photodetector module as set forth above. Honbo in view of Waldner fails to disclose the mount frame and the shielding frame are kept at the same potential. However, Nishimura discloses (fig. 8) a photodetector module with a shield and mount frame with equal potentials (page 4, paragraph 0035). It would have been obvious to one of ordinary skill in the art at the time the invention was made to put the two frames of Honbo in view of Waldner at equal potential as taught by Nishimura to shield out the most noise (page 4, paragraph 0035).

Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Honbo (JP10074962) in view of Waldner (4809054) as applied to claim 5, and in view of Wyland et al. (5679975).

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In regard to claim 7, Honbo in view of Waldner discloses a photodetector module as set forth above. Honbo in view of Waldner fails to disclose the mount frame and the shielding frame are kept at different potentials. However, Wyland discloses (fig. 2b) a photodetector module with a shield and mount frame with different potentials (column 2, lines 20-31). It would have been obvious to one of ordinary skill in the art at the time the invention was made to put the two frames of Honbo in view of Waldner at different potentials as taught by Wyland in order to shield out the desired amount of noise.

Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Honbo (JP10074962) in view of Waldner (4809054) as applied to claim 5, and in view of Worley et al. (6885016).

In regard to claim 8, Honbo in view of Waldner discloses a photodetector module as set forth above. Honbo in view of Waldner fails to disclose a circuit element mounted on the mount frame. However, Worley discloses (fig. 3b) a similar photodetector module with a photodetector (312) on a mount frame as well as an integrated circuit (307) on the mount frame (column 6, lines 20-36). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Honbo in view of Waldner to include an integrated circuit with the photodetector in order to make the system more compact and to eliminate noise by providing the same shielding to the circuit.

Response to Arguments

Applicant's arguments with respect to claims 1-9 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

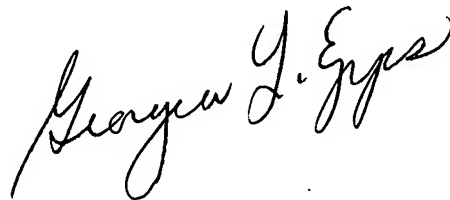
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian J. Livedalen whose telephone number is (571) 272-2715. The examiner can normally be reached on 7:30 am to 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Georgia Epps can be reached on (571) 272-2328. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

bjl

A handwritten signature in black ink, reading "Georgia Epps". The signature is written in a cursive, flowing style.

Georgia Epps
Supervisory Patent Examiner
Technology Center 2800